STATE ASSESSMENT RESULTS 2016

Report to the Mansfield Board of Education

December 8, 2016

Kelly M. Lyman

Superintendent

Smarter Balanced Assessment

Required by Federal and State Law

- Grades 3-8
- Smarter Balanced Assessment: English/Language Arts and Math
- CT Mastery Test: Science (grade 5 and 8 only)

Assessment Purposes

- Measure student progress/attainment of skills needed to be college and career ready (measures CT Core Standards)
- Evaluate school and district programs
- Provide a snapshot of performance that when combined with other assessments and samples of student work can be used to make educational decisions

Smarter Balanced Assessment

Computer-Based Tests have:

- **Interactive test items:** i.e., matching, complete a table with missing information, click and drag (includes use of multi-media)
- **Accessibility features and supports:** built-in accommodations aligned to the student's Individualized Education Program (IEP)
- **Computer Adaptive Test:** Questions adjust to each student's ability

Changes to 2016 Test

English Language Arts - Computer Adaptive Test Only*

- Short-answer, multiple-choice questions and interactive test items
- Questions adjust to each student's ability

Mathematics – Computer Adaptive Test and Performance Task

- Longer multi-step questions
- Approx. 60 minutes to complete
- Includes a classroom pre-lesson
- Measures depth of understanding and application

Total Testing Time Reduced to 3 - 3.5 hours

*Comparison of 2015 results to 2016 results requires adjusted score of 2015 ELA Assessment

What Do the English Language Arts/Literacy Tests Measure?

1. Can students **read closely** to understand different types of texts?
2. Can students **write effectively** for multiple purposes and audiences? *
3. Can students **listen effectively** for different purposes?
4. Can students use **research skills** to investigate topics, and analyze, integrate, and present information? *

** Claims 2 and 4 combined into one reporting category beginning 2015-16*

Smarter Balanced: ELA Results Reported as:

- **Overall Claim for Grades 3-8 – Students can demonstrate progress toward college and career readiness in ELA/literacy.**
- **Overall Claim for Grade 11 – Students can demonstrate college and career readiness in ELA/literacy.**

- **Claim #1 – Reading – Students can read closely and analytically to comprehend a range of increasingly complex literary and informational texts**
- **Claim #2 – Writing – Students can produce effective and well-grounded writing for a range of purposes and audiences.**
- **Claim #3 – Speaking and Listening – Students can employ effective speaking and listening skills for a range of purposes and audiences.**
- **Claim #4 – Research/Inquiry – Students can engage in research and inquiry to investigate topics, and to analyze, integrate, and present information.**

Claims 2 and 4 combined into one reporting category beginning 2015-16

What Do the Mathematics Tests Measure?

1. Can students explain and use math **concepts** to solve problems?
2. Can students solve math problems using their knowledge of concepts and **problem solving** strategies?
3. Can students **explain, justify, illustrate, or defend** their reasoning about a solution to a problem and be able to look at other solutions to do the same?
4. Can students solve problems by using math **models** to represent a situation and interpret information from the problem to solve the problem?

** Claims 2 and 4 combined into one reporting category in CT*

Smarter Balanced: Math Results Reported as:

- Overall Claim for Grades 3-8 – Students can demonstrate progress toward college and career readiness in mathematics.
- Overall Claim for Grade 11 – Students can demonstrate college and career readiness in mathematics.

- Claim #1 – Concepts and procedures – Students can explain and apply mathematical concepts and interpret and carry out mathematical procedures with precision and fluency.
- Claim #2: Problem Solving – Students can solve a range of complex well-posed problems in pure and applied mathematics, making productive use of knowledge and problem solving strategies.
- Claim #3 – Communicating Reasoning – Students can clearly and precisely construct viable arguments to support their own reasoning and to critique the reasoning of others.
- Claim #4 – Modeling and Data Analysis – Students can analyze complex, real-world scenarios and can construct and use mathematical models to interpret and solve problems.

Claims 2 and 4 combined into one reporting category in CT

Smarter Balanced Scoring

- **Level 1 = Does not meet the achievement level**
- **Level 2 = Approaching the achievement level expected**
- **Level 3 = Meets the achievement level expected**
- **Level 4 = Exceeds the achievement level expected**

Note: These achievement levels have absolutely no relationship to CMT/CAPT achievement levels used previously.

Scoring continued

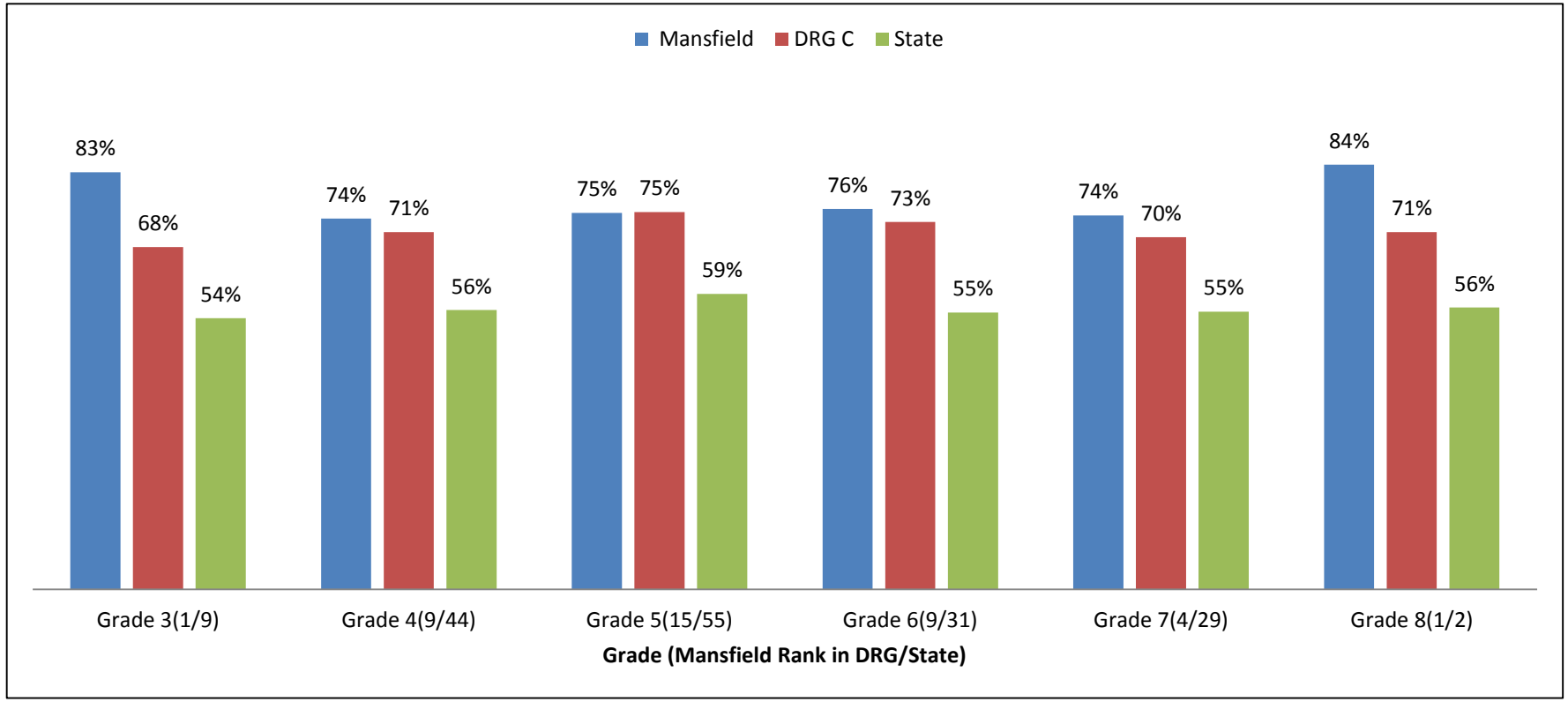
- Students also receive a “performance indicator” for each area of knowledge and skills within a subject – the Claims.
- This provides a general indication of where the students have strengths and weaknesses in their learning within each subject area.

For example:

Areas of Knowledge and Skill	Performance
Concepts and Procedures	Above Standard
Problem Solving and Modeling & Data Analysis	Below Standard
Communicating Reasoning	At/Near Standard

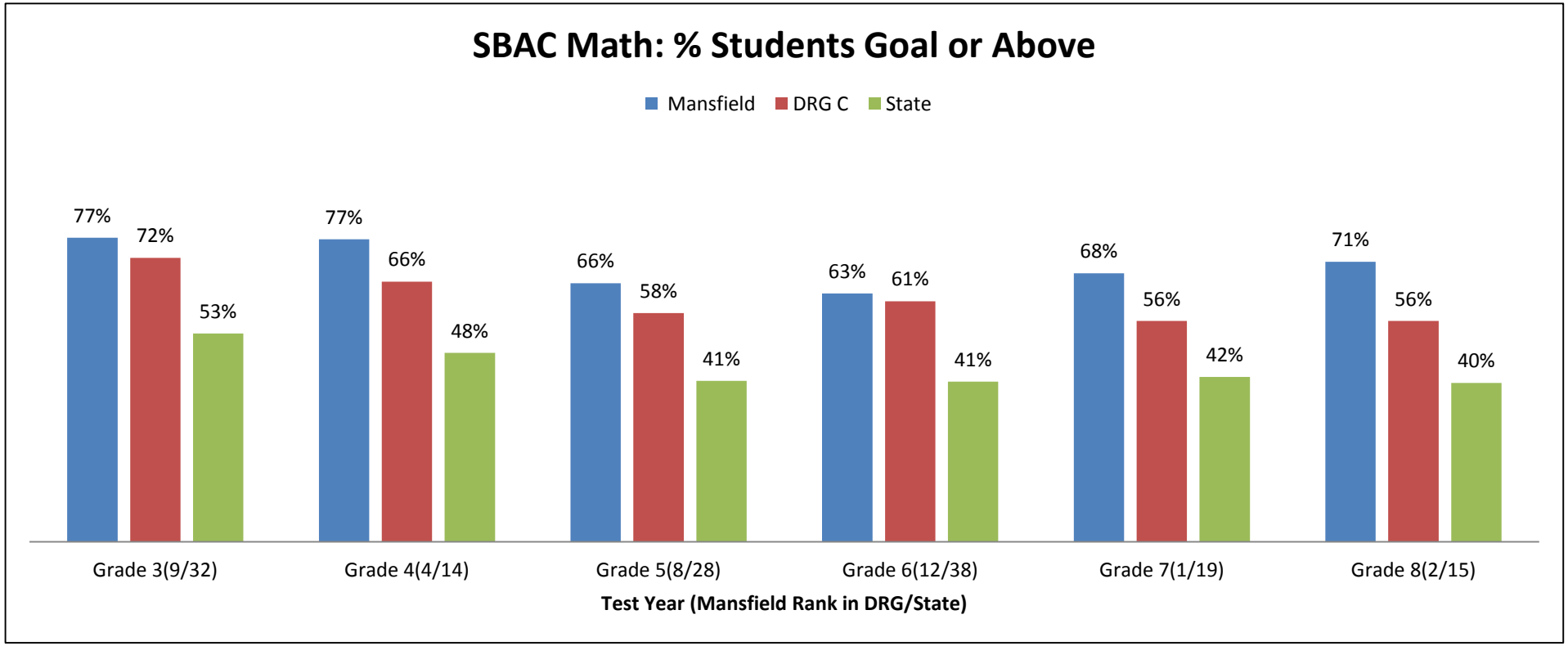
English/Language Arts: Percentage of Students Meeting or Exceeding Achievement Level 2016

District	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8
Mansfield	83%	74%	75%	76%	74%	84%
DRG C	67%	73%	77%	72%	74%	72%
State	54%	56%	59%	55%	55%	55%



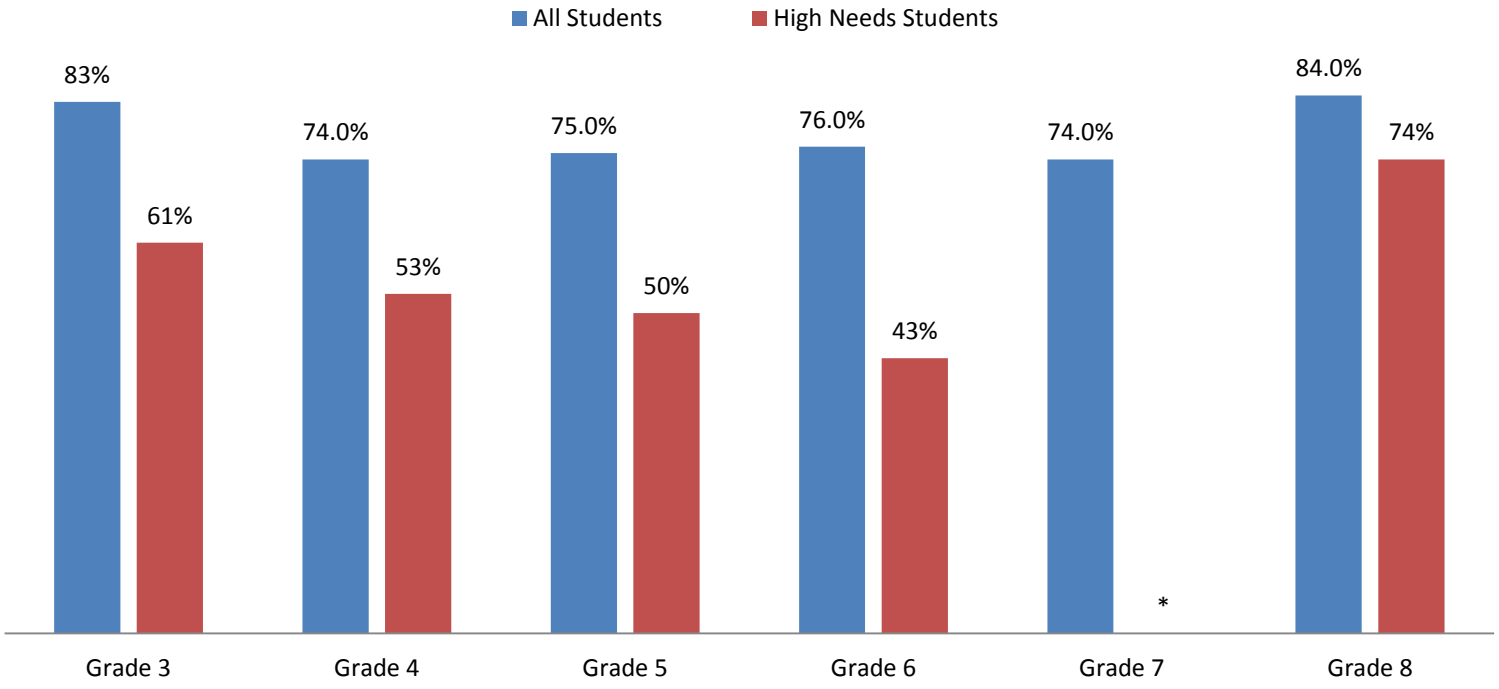
Mathematics: Percentage of Students Meeting or Exceeding Achievement Level 2016

District	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8
Mansfield	77%	77%	66%	63%	68%	71%
DRG C	72%	66%	58%	61%	56%	56%
State	53%	48%	41%	41%	42%	40%



English/Language Arts High Needs Subgroup#
Percentage of Students Meeting or Exceeding Achievement Level
2016

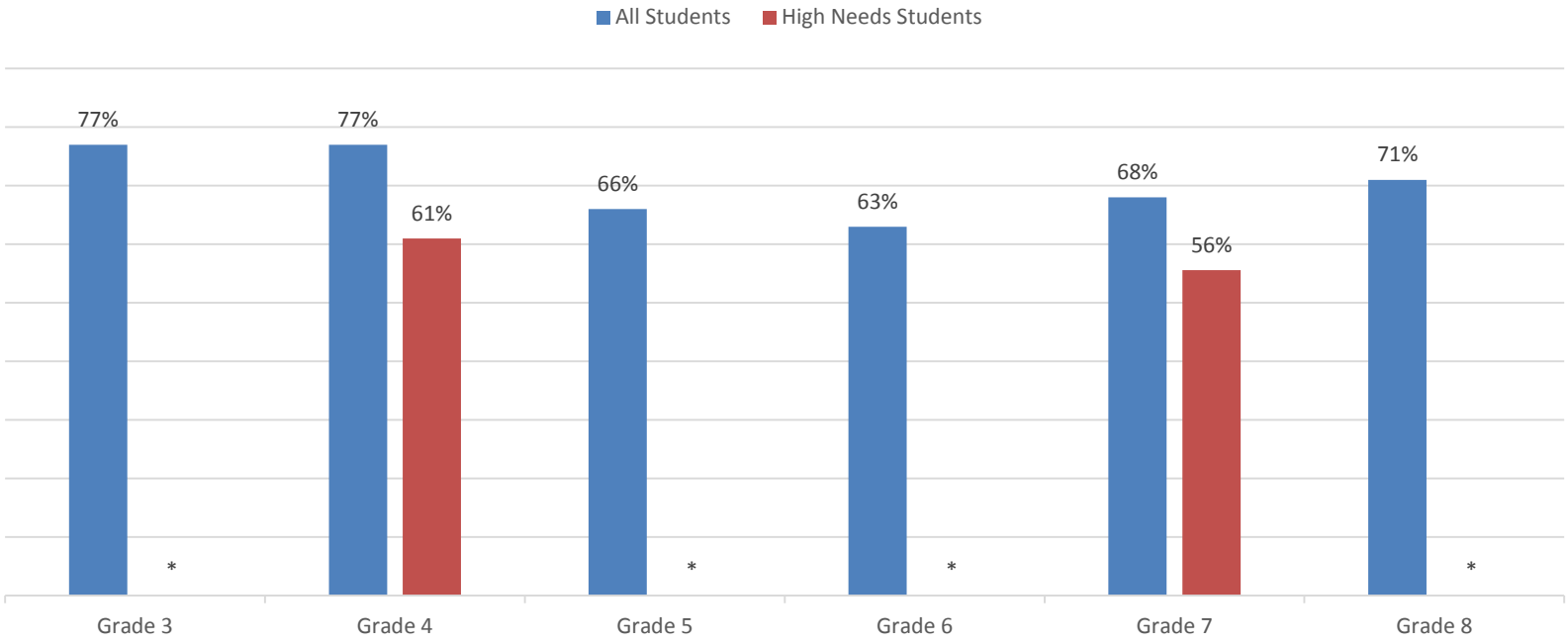
Students	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8
All Students	83%	74%	75%	76%	74%	84%
High Needs	61%	53%	50%	43%	*	74%



High Needs Subgroup includes students with special needs, those who receive free or reduced priced meals, and English Language Learners.
* Data are suppressed to ensure confidentiality.

Mathematics High Needs Subgroup#
Percentage of Students Meeting or Exceeding Achievement Level
2016

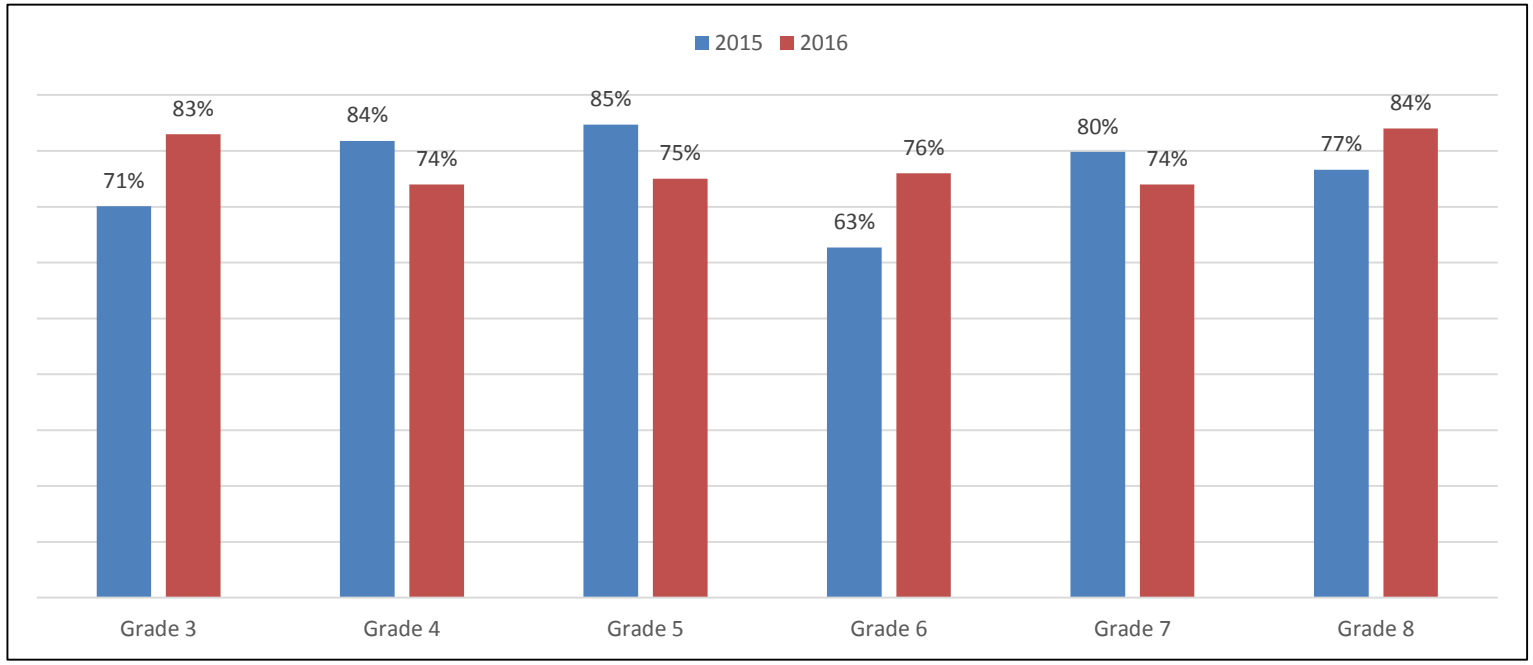
Students	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8
All Students	77%	77%	66%	63%	68%	71%
High Needs	*	61%	*	*	56%	*



High Needs Subgroup includes students with special needs, those who receive free or reduced priced meals, and English Language Learners.
* Data are suppressed to ensure confidentiality.

Longitudinal Data
English/Language Arts* Percentage of Students Meeting or Exceeding Achievement Level
2016

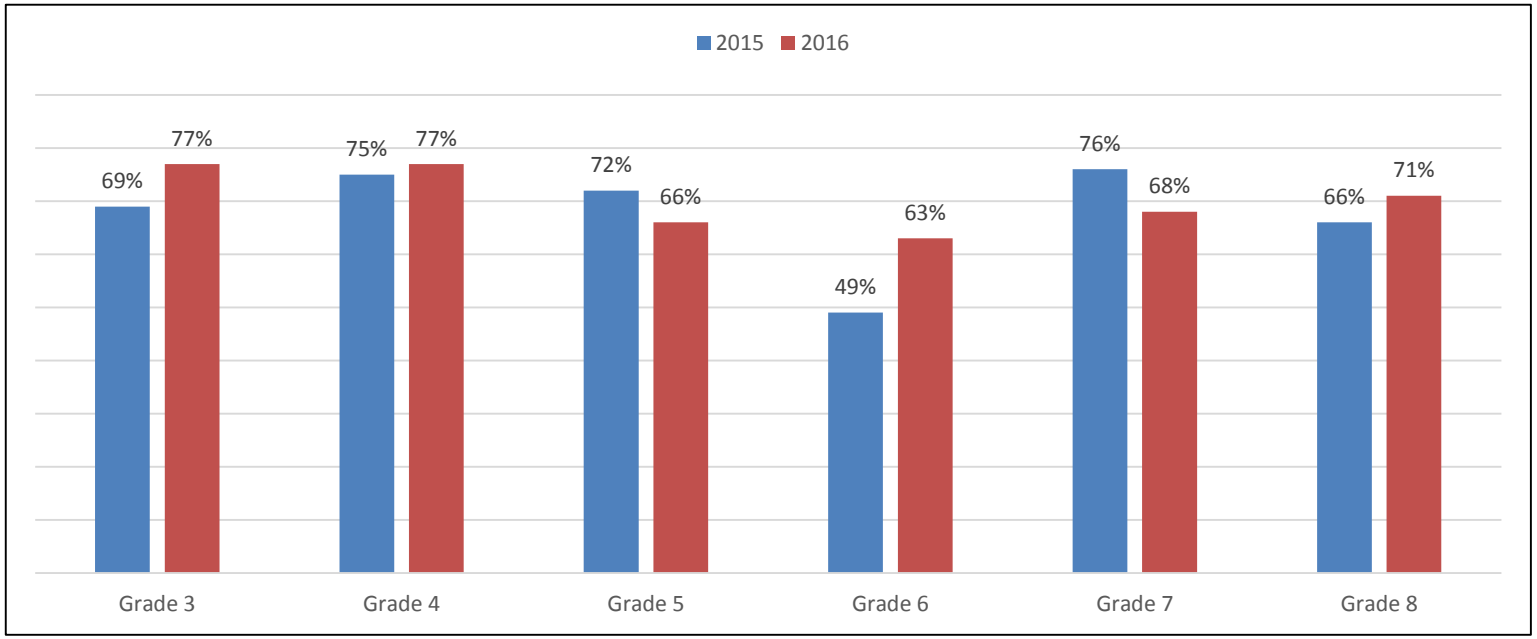
Students	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8
2015	70%	82%	85%	63%	80%	77%
2016	83%	74%	75%	76%	74%	84%



*Adjusted score CAT only

Longitudinal Data
Mathematics Percentage of Students Meeting or Exceeding Achievement Level
2016

Students	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8
2015	69%	75%	72%	49%	76%	66%
2016	77%	77%	66%	63%	68%	71%



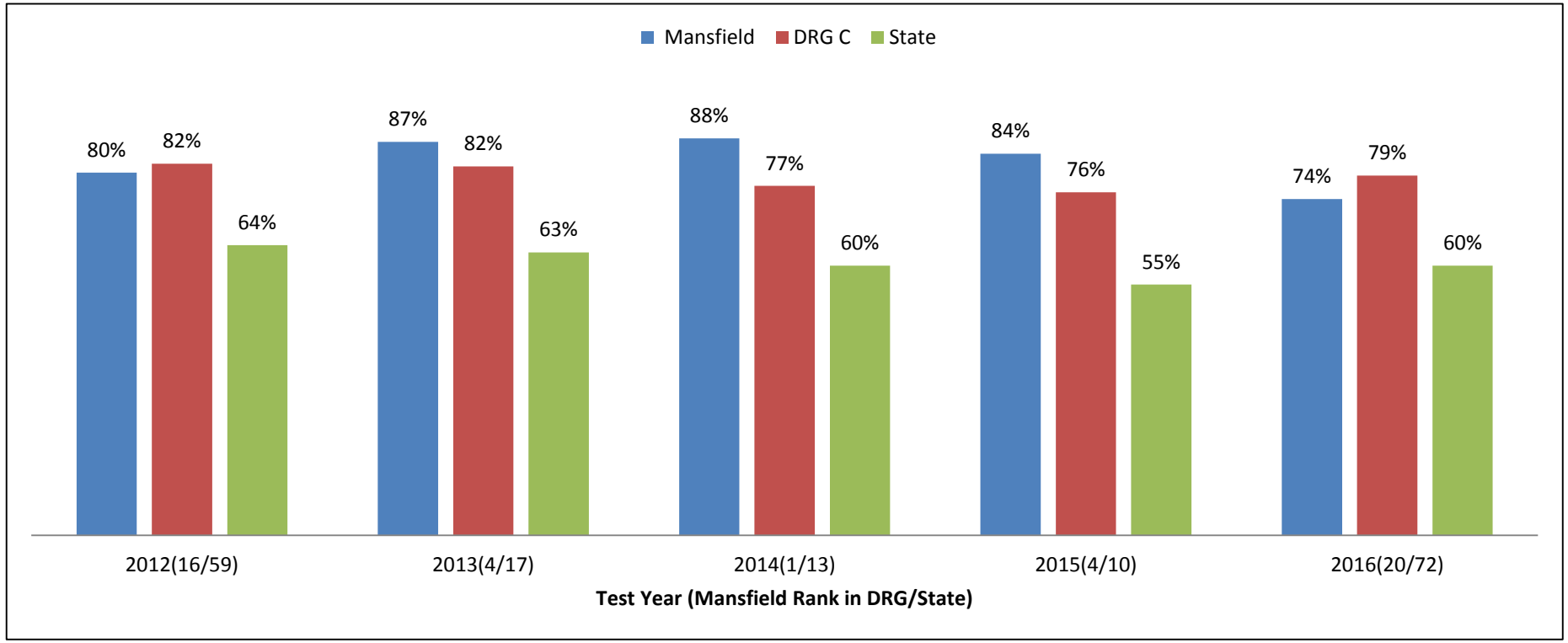
Overall Comparison of Performance

Combined Performance of all grades

	2015	2016
	Percent meeting or exceeding achievement levels	
English/Language Arts	75.7	78
Mathematics	67.9	70.3

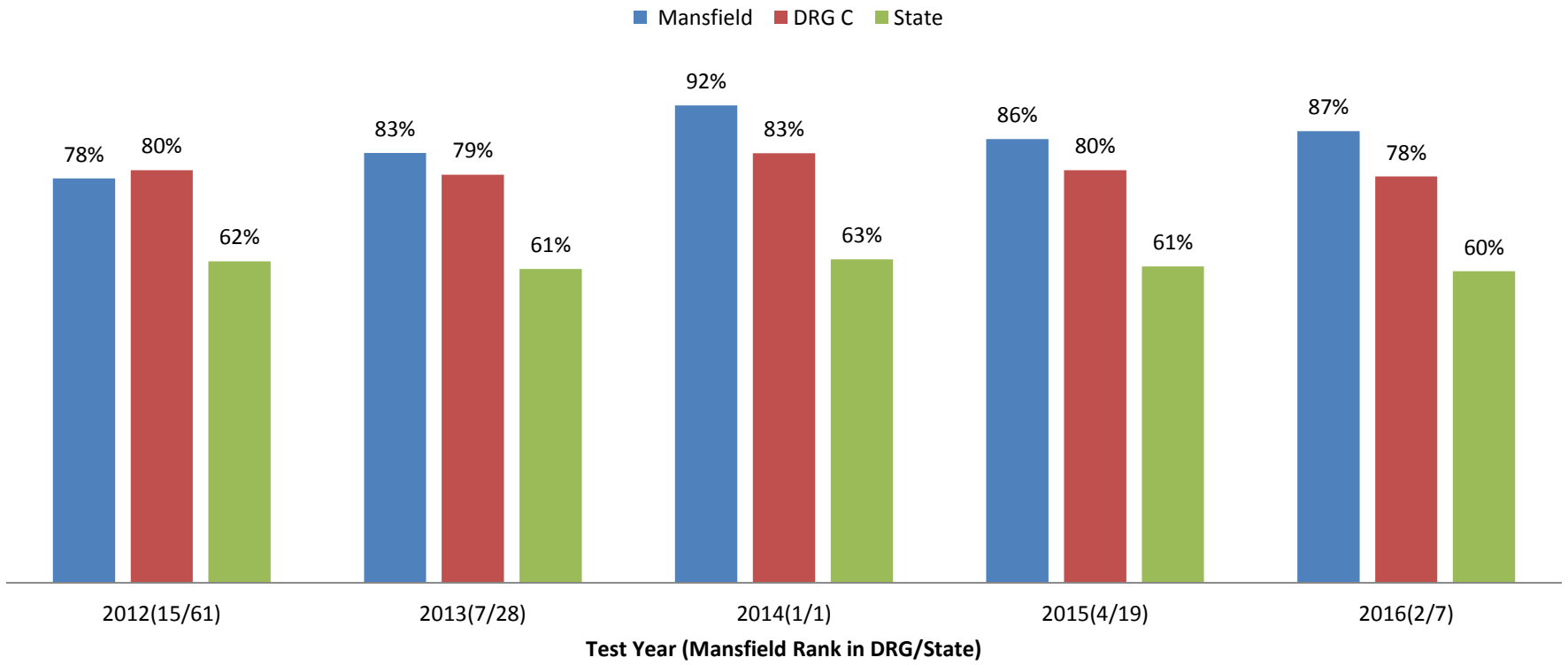
CMT Science, Grade 5: Percentage of Students Meeting or Exceeding Achievement 2016

District	2012	2013	2014	2015	2016
Mansfield	80%	87%	88%	84%	74%
DRG C	82%	82%	77%	76%	79%
State	64%	63%	60%	55%	60%



CMT Science, Grade 8: Percentage of Students Meeting or Exceeding Achievement 2016

District	2012	2013	2014	2015	2016
Mansfield	78%	83%	92%	88%	87%
DRG C	80%	79%	83%	80%	78%
State	62%	61%	63%	61%	60%



Conclusions

- Mansfield students outperformed many students in like communities. Of the 29 DRG C districts, Mansfield ranks first in grade 7 mathematics and grades 3 and 8 ELA. All but three tests were in the top third of the DRG.
- Performance of students who qualify for special education, free and reduced price meals, or are English language learners (High Needs subgroup) exceed the State average.
- The gap between High Needs students and those without needs is much smaller in Mansfield than in the State as a whole.
- 93.2% of students in Mansfield participated in Smarter Balanced in 2015-16, about the same as in 2014-15.

How are the Data Used?

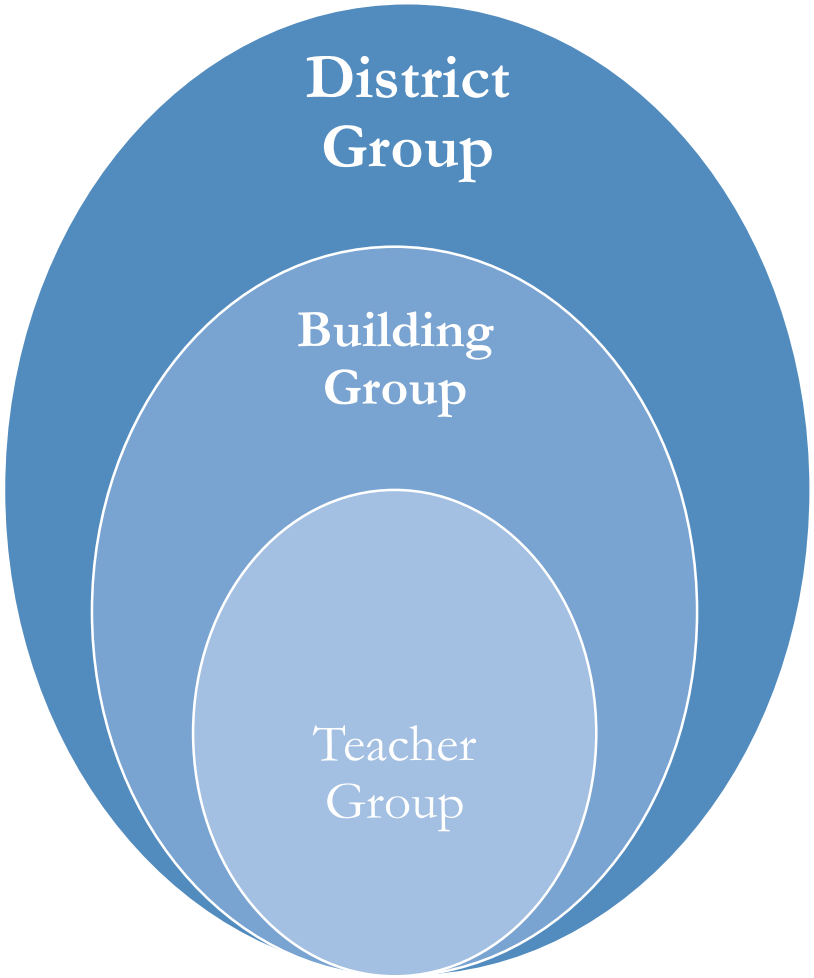
- Growth of the individual student will become the focus of our work as new metrics are made available.
- Smarter Balanced results are compared to other measures of student achievement (ex. STAR Assessments, Developmental Reading Assessment, writing assessments, end of unit math assessments, teacher focused observations) to get a complete picture of student performance.
- Teachers and administrators are “drilling down” into the data to access information for instructional planning.

Drilling Down From Claims to Learning Targets

ELA Claims	Number of Targets
Reading	14
Listening	1
Writing & Research/Inquiry	8

Reporting Groups for Target-Levels

Icon	Target Level	Description
+	Better than performance on the test as a whole	This target is a relative strength. The group of students performed better on items from this target than they did on the test as a whole.
=	Similar to performance on the test as a whole	This target is neither a relative strength nor a relative weakness. The group of students performed about as well on items from this target as they did on the test as a whole.
−	Worse than performance on the test as a whole	This target is a relative weakness. The group of students did not perform as well on items from this target as they did on the test as a whole.
*	Insufficient Information	Not enough information is available to determine whether this target is a relative strength or weakness.



Target	Performance Level
Reading	
(Informational Text) KEY DETAILS: Given an inference or conclusion, use explicit details and implicit information from the text to support the inference or conclusion provided.	=
(Informational Text) CENTRAL IDEAS: Identify or determine a main idea and the key details that support it.	=
(Informational Text) WORD MEANINGS: Determine intended meanings of words, including academic/tier 2 words, domain-specific (tier 3) words, and words with multiple meanings, based on context, structure (e.g., common Greek or Latin roots, affixes), or use of reference materials (e.g., dictionary) with primary focus on determining meaning based on context and the academic (tier 2) vocabulary common to complex texts in all disciplines.	+
(Informational Text) REASONING & EVIDENCE: Make an inference or draw a conclusion about a text OR make inferences or draw conclusions in order to compare texts (e.g., events, ideas, concepts, procedures; point of view; use of information from illustrations; compare and contrast points or key details) and use supporting evidence as justification/explanation.	−
(Informational Text) ANALYSIS WITHIN OR ACROSS TEXTS: Describe information within or across texts (e.g., events, ideas, concepts, procedures, sequence or cause/effect) or distinguish the author's point of view.	=
(Informational Text) TEXT STRUCTURES OR TEXT FEATURES: Relate knowledge of text features (e.g., maps, photographs) to demonstrate understanding of the text.	=
(Informational Text) LANGUAGE USE: Demonstrate understanding of word relationships and nuances, literal and non-literal words and phrases used in context, or identify connections between words and their uses.	★

Identified SBAC Target Area(s) Where Students Underperformed in Relation to Their Overall Performance

Target	Performance Level
Concepts and Procedures	
Understand ratio concepts and use ratio reasoning to solve problems.	
Apply and extend previous understandings of multiplication and division to divide fractions by fractions.	
Compute fluently with multi-digit numbers and find common factors and multiples.	
Apply and extend previous understandings of numbers to the system of rational numbers.	
Apply and extend previous understandings of arithmetic to algebraic expressions.	
Reason about and solve one-variable equations and inequalities.	
Represent and analyze quantitative relationships between dependent and independent variables.	
Solve real-world and mathematical problems involving area, surface area, and volume.	
Develop understanding of statistical variability.	
Summarize and describe distributions.	

Identified Connecticut Core Standard(s) Related to the SBAC Target Area(s) of Concern

Compute fluently with multi-digit numbers and find common factors and multiples.

Compute fluently with multi-digit numbers and find common factors and multiples.

CCSS.MATH.CONTENT.6.NS.B.2

Fluently divide multi-digit numbers using the standard algorithm.

CCSS.MATH.CONTENT.6.NS.B.3

Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.

CCSS.MATH.CONTENT.6.NS.B.4

Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1-100 with a common factor as a multiple of a sum of two whole numbers with no common factor. *For example, express 36 + 8 as 4 (9 + 2)..*

Teachers Examine Practices

- Is the given standard being addressed in our curriculum?
- How are we teaching these concepts and skills?
- Do our assessments adequately measure the CT Core standards?